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REMARKS

Claims 1-48 are pending in this application. Claims 1, 16 and 33 are the independent claims.

Claim 1 stands rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 1 of U.S. Patent No. 6,870,993. Further, Claims 8, 23 and 33 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 20 and 40, respectively, of U.S. Patent Application Serial No. 10/715,330. It is respectfully requested that the issue regarding the need for Terminal Disclaimers in this matter be held in abeyance, pending resolution of the other patentability issues herein.

Claims 1-13, 16-28, 31-45 and 48 stand rejected under 35 U.S.C. 102(e) as being anticipated by Cabrera et al., U.S. Patent No. 6,381,394. Claims 14-15, 29-30 and 46-47 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Cabrera et al. These rejections are hereby traversed for at least the following reasons.

The present invention as set forth in claim 1 provides an optical amplifier module containing at least one optical amplifier. The optical amplifier module comprising an internal housing having an outer dimension substantially equal to an outer dimension of an internal fiber splice housing of an undersea optical fiber cable joint. The internal housing includes: (i) a pair of opposing end faces each having a retaining element for retaining the internal housing within an outer housing of said undersea optical fiber cable joint; (ii) a sidewall interconnecting said opposing end faces and extending between said opposing end faces in a longitudinal direction, said sidewall including a receptacle portion having a plurality of thru-holes each being sized to receive a passive optical component employed in an optical amplifier.

In the particular embodiment of the invention set forth in the figures of the application, the claimed *internal housing* corresponds to internal housing 404, which is formed from half units 404 and 404' (see figures 4 and 5), the claimed *end faces* correspond to end faces 403, the claimed *retaining elements* correspond to flanges 402, the claimed *sidewall* of the internal housing corresponds to curved sidewalls 412, and the claimed thru-holes located in the sidewall corresponds to receptacles 418.

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The Examiner asserts that Cabrera et al. discloses each of the elements set forth in claim 1. Specifically, the Examiner asserts that the claimed *internal housing* corresponds to the amp pair 330 seen in FIG. 4 of Cabrera et al., the claimed *end faces* corresponds to the top module 370, and the claimed *sidewall* of the internal housing corresponds to base modules 320, 321 and 322. Presumably the Examiner is also asserting that the *outer housing* of the undersea optical fiber cable joint set forth in claim 1 corresponds to the internal structure 350 seen in FIG. 3. Applicants respectfully submit that this correspondence between the elements of the claim and the elements shown in Cabrera et al. is incorrect. That is, Applicants respectfully submit that the amp pair 330 fails to show the claimed features of the internal housing set forth in claim 1.

Specifically, the present invention sets forth that the claimed *internal housing* has *a pair of opposing end faces each having a retaining element for retaining the internal housing within an outer housing of said undersea optical fiber cable joint*. With respect to this claimed feature the Examiner asserts that the top module 370 seen in FIGs. 4, 10 and 11 of Cabrera et al. corresponds to the claimed end faces. Applicants respectfully submit that this correspondence fails for a number reasons. First, Applicants fail to see a pair of top modules 370, as required by claim 1. Rather, the amp pair 330 appears to only include a single top module 370. Second, claim 1 requires that each of the end faces has a *retaining element* that retains the internal housing within the outer housing. If the Examiner's correspondence to Cabrera et al. were correct, this would require that the top module 370 include a retaining element that retains the amp pair 330 within the internal structure 350. However the top module 370 does not retain the amp pair 330 within the internal structure 350. Rather, the top module 370 includes apertures 550 that are defined in flanges 530, which are used to secure top module 370 to the base modules 320, 321 and 322 (see FIG. 11 and column 6, lines 57-63 of the patent). That is, the top module 370 retains various internal components of the amp pair 330 itself. Applicants' fail to see any discussion in Cabrera et al. that suggests the top module 370 is also employed to retain the amp pair 330 within the internal structure 350.

Claim 1 of the present invention further requires that the *internal housing* include a *sidewall* that interconnects the opposing *end faces*. The Examiner asserts that the claimed *sidewall* corresponds to the base modules 320, 321 and 322 in Cabrera et al.

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Once again, Applicants respectfully submit that this correspondence is incorrect. As noted above, Applicants fail to see a pair of end faces that oppose one another. Even assuming *arguendo* that there are two end faces (e.g., two top modules 370 that oppose one another), Applicants fail to see how the base modules 320, 321 and 322 meet the other requirements of the sidewall set forth in claim 1. For instance, in claim 1 the *sidewall* extends *between* the opposing end faces. How do the base modules 320, 321 and 322 extend between two top modules 370? Applicants fail to see this claimed relationship among the elements in Cabrera et al. Furthermore, claim 1 also requires that the *sidewall* extend between the opposing end faces *in a longitudinal direction*. The Examiner suggests that in Cabrera et al. the claimed longitudinal direction corresponds to the longitudinal plane 333 seen in FIG. 3 of the patent. If so, then how do the base modules 320, 321 and 322 extend between opposing end faces in this longitudinal direction? Applicants' once again completely fail to see this claimed relationship among the elements in Cabrera et al.

Since Cabrera et al. does not show an internal structure that meets each and every limitation set forth in claim 1, Applicants respectfully request that the rejection of independent claim 1 be reconsidered and withdrawn. The rejection of independent claims 16 and 33 should also be reconsidered and withdrawn for at least those reasons presented above with respect to claim 1. The rejection of the dependent claims under 35 U.S.C. 102(e) and 103(a) should also be reconsidered and withdrawn since each depends from and further defines the invention set forth in the independent claims.

Conclusion

In view of the foregoing, it is believed that the application is now in condition for allowance and early passage of this case to issue is respectfully requested. If the Examiner believes there are still unresolved issues, a telephone call to the undersigned would be welcomed.

Fees

If there any fees due and owing in respect to this amendment, the Examiner is authorized to charge such fees to deposit account number 50-1047.

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Respectfully submitted,

Stuart H. Mayer

Stuart H. Mayer

Registration No. 35,277

Attorney for Applicant
Mayer & Williams PC
251 North Avenue West, 2nd Floor
Westfield, NJ 07090
(908) 518-7700 Tel.
(908) 518-7795 Fax

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Marjorie Scariati

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Marjorie Scariati

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